

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
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Application Serial Number: 10/562,776
Source: JFW/P
Date Processed by STIC: 1/10/06

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PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/562,776

DATE: 01/10/2006
TIME: 08:50:37

Input Set : A:\248832.ST25.txt
Output Set: N:\CRF4\01102006\J562776.raw

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3 <110> APPLICANT: Kuroita, Toshihiro
4           Sogabe, Atsushi
5           Takarada, Yutaka
6           Tanaka, Naoki
8 <120> TITLE OF INVENTION: PROTEIN ACHIEVING IMPROVED BLOCKING EFFICIENCY
10 <130> FILE REFERENCE: 248832
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/562,776
C--> 12 <141> CURRENT FILING DATE: 2005-12-29
12 <150> PRIOR APPLICATION NUMBER: PCT/JP04/09785
13 <151> PRIOR FILING DATE: 2004-07-02
15 <150> PRIOR APPLICATION NUMBER: JP 2003-191081
16 <151> PRIOR FILING DATE: 2003-07-03
18 <160> NUMBER OF SEQ ID NOS: 17
20 <170> SOFTWARE: PatentIn version 3.3
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 638
24 <212> TYPE: PRT
25 <213> ORGANISM: Escherichia coli
27 <400> SEQUENCE: 1
29 Met Gly Lys Ile Ile Gly Ile Asp Leu Gly Thr Thr Asn Ser Cys Val
30 1           5           10          15
33 Ala Ile Met Asp Gly Thr Thr Pro Arg Val Leu Glu Asn Ala Glu Gly
34 20          25          30
37 Asp Arg Thr Thr Pro Ser Ile Ile Ala Tyr Thr Gln Asp Gly Glu Thr
38 35          40          45
41 Leu Val Gly Gln Pro Ala Lys Arg Gln Ala Val Thr Asn Pro Gln Asn
42 50          55          60
45 Thr Leu Phe Ala Ile Lys Arg Leu Ile Gly Arg Arg Phe Gln Asp Glu
46 65          70          75          80
49 Glu Val Gln Arg Asp Val Ser Ile Met Pro Phe Lys Ile Ile Ala Ala
50 85          90          95
53 Asp Asn Gly Asp Ala Trp Val Glu Val Lys Gly Gln Lys Met Ala Pro
54 100         105         110
57 Pro Gln Ile Ser Ala Glu Val Leu Lys Lys Met Lys Lys Thr Ala Glu
58 115         120         125
61 Asp Tyr Leu Gly Glu Pro Val Thr Glu Ala Val Ile Thr Val Pro Ala
62 130         135         140
65 Tyr Phe Asn Asp Ala Gln Arg Gln Ala Thr Lys Asp Ala Gly Arg Ile
66 145         150         155         160
69 Ala Gly Leu Glu Val Lys Arg Ile Ile Asn Glu Pro Thr Ala Ala Ala
70 165         170         175
73 Leu Ala Tyr Gly Leu Asp Lys Gly Thr Gly Asn Arg Thr Ile Ala Val
74 180         185         190

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77 Tyr Asp Leu Gly Gly Gly Thr Phe Asp Ile Ser Ile Ile Glu Ile Asp
 78 195 200 205
 81 Glu Val Asp Gly Glu Lys Thr Phe Glu Val Leu Ala Thr Asn Gly Asp
 82 210 215 220
 85 Thr His Leu Gly Gly Glu Asp Phe Asp Ser Arg Leu Ile Asn Tyr Leu
 86 225 230 235 240
 89 Val Glu Glu Phe Lys Lys Asp Gln Gly Ile Asp Leu Arg Asn Asp Pro
 90 245 250 255
 93 Leu Ala Met Gln Arg Leu Lys Glu Ala Ala Glu Lys Ala Lys Ile Glu
 94 260 265 270
 97 Leu Ser Ser Ala Gln Gln Thr Asp Val Asn Leu Pro Tyr Ile Thr Ala
 98 275 280 285
 101 Asp Ala Thr Gly Pro Lys His Met Asn Ile Lys Val Thr Arg Ala Lys
 102 290 295 300
 105 Leu Glu Ser Leu Val Glu Asp Leu Val Asn Arg Ser Ile Glu Pro Leu
 106 305 310 315 320
 109 Lys Val Ala Leu Gln Asp Ala Gly Leu Ser Val Ser Asp Ile Asp Asp
 110 325 330 335
 113 Val Ile Leu Val Gly Gly Gln Thr Arg Met Pro Met Val Gln Lys Lys
 114 340 345 350
 117 Val Ala Glu Phe Phe Gly Lys Glu Pro Arg Lys Asp Val Asn Pro Asp
 118 355 360 365
 121 Glu Ala Val Ala Ile Gly Ala Ala Val Gln Gly Gly Val Leu Thr Gly
 122 370 375 380
 125 Asp Val Lys Asp Val Leu Leu Asp Val Thr Pro Leu Ser Leu Gly
 126 385 390 395 400
 129 Ile Glu Thr Met Gly Gly Val Met Thr Thr Leu Ile Ala Lys Asn Thr
 130 405 410 415
 133 Thr Ile Pro Thr Lys His Ser Gln Val Phe Ser Thr Ala Glu Asp Asn
 134 420 425 430
 137 Gln Ser Ala Val Thr Ile His Val Leu Gln Gly Glu Arg Lys Arg Ala
 138 435 440 445
 141 Ala Asp Asn Lys Ser Leu Gly Gln Phe Asn Leu Asp Gly Ile Asn Pro
 142 450 455 460
 145 Ala Pro Arg Gly Met Pro Gln Ile Glu Val Thr Phe Asp Ile Asp Ala
 146 465 470 475 480
 149 Asp Gly Ile Leu His Val Ser Ala Lys Asp Lys Asn Ser Gly Lys Glu
 150 485 490 495
 153 Gln Lys Ile Thr Ile Lys Ala Ser Ser Gly Leu Asn Glu Asp Glu Ile
 154 500 505 510
 157 Gln Lys Met Val Arg Asp Ala Glu Ala Asn Ala Glu Ala Asp Arg Lys
 158 515 520 525
 161 Phe Glu Glu Leu Val Gln Thr Arg Asn Gln Gly Asp His Leu Leu His
 162 530 535 540
 165 Ser Thr Arg Lys Gln Val Glu Glu Ala Gly Asp Lys Leu Pro Ala Asp
 166 545 550 555 560
 169 Asp Lys Thr Ala Ile Glu Ser Ala Leu Thr Ala Leu Glu Thr Ala Leu
 170 565 570 575
 173 Lys Gly Glu Asp Lys Ala Ala Ile Glu Ala Lys Met Gln Glu Leu Ala

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174	580	585	590
177 Gln Val Ser Gln Lys Leu Met Glu Ile Ala Gln Gln His Ala Gln			
178	595	600	605
181 Gln Gln Thr Ala Gly Ala Asp Ala Ser Ala Asn Asn Ala Lys Asp Asp			
182	610	615	620
185 Asp Val Val Asp Ala Glu Phe Glu Glu Val Lys Asp Lys Lys			
186	625	630	635
189 <210> SEQ ID NO: 2			
190 <211> LENGTH: 1917			
191 <212> TYPE: DNA			
192 <213> ORGANISM: Escherichia coli			
194 <400> SEQUENCE: 2			
195 atgggtaaaa taattggtat cgacctgggt actaccaact ctttgttagc gattatggat	60		
197 ggcaccactc ctcgcgtgct ggagaacgcc gaaggcgatc gcaccacgcc ttctatcatt	120		
199 gcctatacccg aggatggtga aactctagtt ggtcagccgg ctaaacgtca ggcagtgacg	180		
201 aaccgcggaaa acactctgtt tgcgattaaa cgcctgattt gtcgcccgtt ccaggacgaa	240		
203 gaagtgacagc gtgatgtttc catcatgccg ttcaaaaattt ttgctgtga taacggcggac	300		
205 gcatgggtcg aagttaaagg ccagaaaatg gcaccgcgc agattctgc tgaagtgtcg	360		
207 aaaaaaatga agaaaaaccgc tgaagattac ctgggtgaac cggttaactga agctgttata	420		
209 accgtaccgg catactttaa cgatgctcag cgtcaggcaa ccaaagacgc agggcgatc	480		
211 gctggctcgg aagtaaaaacg tatcatcaac gaaccgaccg cagctgcgtt ggcttacggt	540		
213 ctggacaaag gcactggcaa ccgtactatc gcgggttatg acctgggtgg tggactttc	600		
215 gatatttcta ttatcgaaat cgacgaaggat gacggcgaaa aaaccttgcg agttctggca	660		
217 accaacgggtg atacccacct ggggggtgaa gacttcgaca gccgtctgtat caactatctg	720		
219 gttgaagaat tcaagaaaaga tcagggcatt gacctgcgcg acgatccgtt ggcaatgcag	780		
221 cgcctgaaag aagcggcaga aaaagcggaaa atcgaactgt cttccgtcgcg acgacccgac	840		
223 gttAACCTGC catacatcac tgcagacgcg accgggtccga aacacatgaa catcaaagtgc	900		
225 actcgtgcga aactggaaag cctgggtgaa gatctggtaa accgttccat tgagccgctg	960		
227 aaagttgcac tgcaggacgc tggcctgtcc gtatctgata tcgacgcacgt tattctcggt	1020		
229 ggtggtcaga ctcgtatgcc aatgggtca g aagaaagttt ctgagttttt tggtaaagag	1080		
231 ccgcgtaaag acgttaaccc ggacgaagct gtagcaatcg gtgctgtgt tcaggggtgg	1140		
233 gttctgtactg gtgacgtaaa agacgtactg ctgtggacgc ttaccccgct gtctctgggt	1200		
235 atcgaaacca tggcggtgt gatgacgcacgc ctgatcgcga aaaacaccac tatcccgacc	1260		
237 aagcacagcc aggtgttctc taccgctgaa gacaaccagt ctgcggtaac catccatgtg	1320		
239 ctgcagggtg aacgttaaacg tgcggctgtat aacaaatctc tgggtcagtt caaccttagat	1380		
241 ggtatcaacc cggcaccgcg cggcatgcgc cagatcgaag ttaccttgcg tattcgatgt	1440		
243 gacggtatcc tgcacgtttc cgcgaaagat aaaaacagcg gtaaagagca gaagatcacc	1500		
245 atcaaggctt cttctggctc gaaacgaaagat gaaatccaga aaatggtagc cgacgcacaa	1560		
247 gctaacgcgc aagctgaccg taagttgaa gagctggtagc agactcgaa ccagggcgac	1620		
249 catctgctgc acagcaccccg taagcagggtt gaaagaagcag ggcacaaaactt gcccgtgac	1680		
251 gacaaaactg ctatcgatc tgcgtactgact gcaactggaaa ctgtctgaa aggtgaagac	1740		
253 aaagccgcta tcgaagcggaa aatgcaggaa ctggcacagg ttcccagaa actgatggaa	1800		
255 atcgcccagc agcaacatgc ccagcagcag actgcccgtg ctgatgtttc tgcaaacaac	1860		
257 gcgaaagatg acgatgttgcg acgcgttgcgaa ttgttgcgaa g tcaaaagacaa aaaataa	1917		
260 <210> SEQ ID NO: 3			
261 <211> LENGTH: 55			
262 <212> TYPE: DNA			
263 <213> ORGANISM: Artificial			
265 <220> FEATURE:			

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266 <223> OTHER INFORMATION: Synthetic DNA
268 <400> SEQUENCE: 3
269 gcggatccat cgagggtaga ggtgacgtaa aagacgtact gctgctggac gttac      55
272 <210> SEQ ID NO: 4
273 <211> LENGTH: 33
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial
277 <220> FEATURE:
278 <223> OTHER INFORMATION: Synthetic DNA
280 <400> SEQUENCE: 4
281 ttatttttg tcttgactt cttcaaattc agc      33
284 <210> SEQ ID NO: 5
285 <211> LENGTH: 30
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Synthetic DNA
292 <400> SEQUENCE: 5
293 gccggctgac gactaaactg ctatcgagtc      30
296 <210> SEQ ID NO: 6
297 <211> LENGTH: 30
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Synthetic DNA
304 <400> SEQUENCE: 6
305 gactcgatag cagtttagtc gtcagccggc      30
308 <210> SEQ ID NO: 7
309 <211> LENGTH: 30
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Synthetic DNA
316 <400> SEQUENCE: 7
317 tgctctgaaa ggttaagaca aagccgctat      30
320 <210> SEQ ID NO: 8
321 <211> LENGTH: 30
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Synthetic DNA
328 <400> SEQUENCE: 8
329 atagcggctt tgtcttaacc tttcagagca      30
332 <210> SEQ ID NO: 9
333 <211> LENGTH: 30
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial
337 <220> FEATURE:
338 <223> OTHER INFORMATION: Synthetic DNA

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Input Set : A:\248832.ST25.txt
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340 <400> SEQUENCE: 9		
341 gcagcaacat gcctaacagc agactgccgg		30
344 <210> SEQ ID NO: 10		
345 <211> LENGTH: 30		
346 <212> TYPE: DNA		
347 <213> ORGANISM: Artificial		
349 <220> FEATURE:		
350 <223> OTHER INFORMATION: Synthetic DNA		
352 <400> SEQUENCE: 10		
353 ccggcagtct gctttaggc atgttgctgc		30
356 <210> SEQ ID NO: 11		
357 <211> LENGTH: 30		
358 <212> TYPE: DNA		
359 <213> ORGANISM: Artificial		
361 <220> FEATURE:		
362 <223> OTHER INFORMATION: Synthetic DNA		
364 <400> SEQUENCE: 11		
365 ccttcgatat cgttgctgtc ggtatcctgc		30
368 <210> SEQ ID NO: 12		
369 <211> LENGTH: 30		
370 <212> TYPE: DNA		
371 <213> ORGANISM: Artificial		
373 <220> FEATURE:		
374 <223> OTHER INFORMATION: Synthetic DNA		
376 <400> SEQUENCE: 12		
377 gcaggatacc gacagcaacg atatcgaagg		30
380 <210> SEQ ID NO: 13		
381 <211> LENGTH: 27		
382 <212> TYPE: DNA		
383 <213> ORGANISM: Artificial		
385 <220> FEATURE:		
386 <223> OTHER INFORMATION: Synthetic DNA		
388 <400> SEQUENCE: 13		
389 tctggatcca acgaagatga aatccag		27
392 <210> SEQ ID NO: 14		
393 <211> LENGTH: 30		
394 <212> TYPE: DNA		
395 <213> ORGANISM: Artificial		
397 <220> FEATURE:		
398 <223> OTHER INFORMATION: Synthetic DNA		
400 <400> SEQUENCE: 14		
401 gcgatccgc tgaccgttaag tttgaagagc		30
404 <210> SEQ ID NO: 15		
405 <211> LENGTH: 29		
406 <212> TYPE: DNA		
407 <213> ORGANISM: Artificial		
409 <220> FEATURE:		
410 <223> OTHER INFORMATION: Synthetic DNA		
412 <400> SEQUENCE: 15		

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/10/2006
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Input Set : A:\248832.ST25.txt
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,9,10,11,12,13,14,15,16,17

VERIFICATION SUMMARY
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Input Set : A:\248832.ST25.txt
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L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date